

IN THE CLAIMS:

1. (currently amended) A punch and die alignment system, comprising: a first die including a first die aperture for receiving a punch; a second die including a second die aperture for receiving the punch; a first housing including a smooth bore first die passage receiving at least a portion of the first die; and a second housing including a smooth bore second die passage receiving at least a portion of at least one of the first die and the second die, the second die passage being configured to permit at least one of the first die and the second die to rotate therein, thereby permitting the first die aperture and the second die aperture to be aligned with each other.
2. (previously presented) The punch and die alignment system according to claim 1, wherein the second die passage receives at least a portion of the second die and at least a portion of the first die.
3. (previously presented) The punch and die alignment system according to claim 1, wherein the first die passage and the second die passage are configured to permit at least the first die to rotate therein.
4. (previously presented) The punch and die alignment system according to claim 1, further comprising: a first

alignment mark on the first die; and a second alignment mark on the second die; wherein alignment of the first alignment mark and the second alignment mark aligns the first die aperture and the second die aperture.

5. (previously presented) The punch and die alignment system according to claim 1, wherein the first die aperture and the second die aperture are alignable to be concentric within about 5 millionths of an inch.
6. (currently amended) A punch and die assembly, comprising:
a first die including a first die aperture for receiving a punch; a second die including a second die aperture for receiving the punch; a first housing including a smooth bore first die receiving passage receiving at least a portion of the first die; a second housing including a smooth second die passage receiving at least a portion of the second die and being configured to receive at least a portion of the first die, the second die receiving passage being configured to permit at least one of the first die and the second die to rotate therein, thereby permitting the first die aperture and the second die aperture to be aligned with each other; and a punch assembly including a punch, wherein the punch extends through the first die aperture and the second die aperture during a punching operation.

7. (previously presented) The punch and die assembly according to claim 6, wherein the second die passage receives all of the second die and being configured to receive at least a portion of the first die.
8. (previously presented) The punch and die assembly according to claim 6, wherein the first die receiving passage and the second die passage are configured to permit at least the first die to rotate therein.
9. (previously presented) The punch and die assembly according to claim 6, further comprising: a first alignment mark on the first die; and a second alignment mark on the second die; wherein alignment of the first alignment mark and the second alignment mark aligns the first die aperture and the second die aperture.
10. (previously presented) The punch and die assembly according to claim 6, wherein the first die aperture and the second die aperture are alignable to be concentric within about 5 millionths of an inch.
11. (currently amended) The punch and die assembly according to claim 6, further comprising: a compression spring engaging the punch ~~and either the first housing or second housing, thereby~~ for biasing the punch to a retracted position.
12. (withdrawn) A method of aligning dies of a punch die

assembly, the method comprising the steps of: inserting a punch into a punch receiving passage a first die; and aligning the punch receiving passage of the first die with a punch receiving passage of a second die by rotating the first die with respect to the second die and attempting to advance the punch into the punch receiving passage in the second die to determine a location of the first die relative to the second die where the punch will experience a least amount of frictional forces from walls of the punch receiving aperture of the first die and the punch receiving aperture of the second die.

13. (withdrawn) The method according to claim 12, further comprising the step of: recording the relative positions of the first die and the second die after alignment of the first punch receiving passage and the second punch receiving passage by providing a mark on the first die and the second die.
14. (withdrawn) The method according to claim 12, further comprising the steps of: inserting the second die into a die receiving passage in a first housing; and inserting at least a portion of the first die into the die receiving passage in the first housing.
15. (withdrawn) The method according to claim 12, further comprising the steps of: selecting the first die and the

second die for rotational alignment prior to aligning the first punch receiving passage and the second punch receiving passage.

16. (withdrawn) The method according to claim 14, further comprising the step of: selecting the first housing such that the first die will snugly fit into the die receiving passage.
17. (withdrawn) The method according to claim 16, wherein the first housing is selected such that the first die and the die receiving passage in the first housing are concentric to within less than 100 millionths of an inch.
18. (withdrawn) The method according to claim 12, wherein the first punch receiving passage and the second punch receiving passage are aligned to be concentric to within about 5 millionths of an inch.
19. (withdrawn) The method according to claim 14, further comprising the steps of: arranging a second housing on the first die; and arranging a punch assembly onto the second housing, inserting a punch into a punch receiving passage in the first die.
20. (withdrawn) The method according to claim 19, further comprising the step of: arranging a compression spring on the punch to bias the punch in a retracted position after arranging the punch assembly on the second housing.

21. (previously presented) The punch and die alignment system of claim 1, wherein said first and second housings are rotatable relative to each other.
22. (previously presented) The punch and die assembly of claim 6, wherein said first and second housings are rotatable relative to each other.
23. (withdrawn) The punch and die alignment system of claim 1, further comprising means for sensing a frictional resistance between said punch and first and second die apertures, said frictional resistance corresponding to a degree of concentricity of said first and second die apertures.
24. (withdrawn) The punch and die assembly of claim 6, further comprising means for sensing a frictional resistance between said punch and first and second die apertures, said frictional resistance corresponding to a degree of concentricity of said first and second die apertures.
25. (new) The punch and die assembly of claim 1, wherein the space between the outer surface of each of said dies and the inner surface of its die passage is between about 0 and 10 millionths of an inch.
26. (new) The punch and die assembly of claim 6, wherein the space between the outer surface of each of said dies and

the inner surface of its die passage is between about 0 and 10 millionths of an inch.

27. (new) The punch and die assembly of claim 1 wherein at least one of said first die passage and said second die passage is configured to snugly receive at least a portion of each of said first die and said second die and to permit at least one of said first die and said second die to rotate therein.
28. (new) The punch and die assembly of claim 6 wherein at least one of said first die passage and said second die passage is configured to snugly receive at least a portion of each of said first die and said second die and to permit at least one of said first die and said second die to rotate therein.